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Improved SME Competitiveness and Innovation Project

3rd VRPM Meeting

Brief Analysis of Project Ideas from the VRPM Group

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Republic of Serbia
MINISTRY OF ECONOMY AND REGIONAL DEVELOPMENT

This is only a brief analysis.

Companies are invited to have individual meetings with ICIP

1. Development centre WBC ltd.

Planning, optimization, monitoring, and simulation of thermal and fluid circulation in the industrial furnaces environment

How new are the "New finite element method algorithms" ? Would they justify a research project ?

- **FP7-SME-2012** Research for the Benefit of SMEs
- Because of its strong application focus, **EUREKA** could be a possibility.

2. Vlatacom d.o.o.

Advanced Imaging/Video System for Road Traffic Control

"Embedded" into what ? Is there a need for research?

- Not FP7 ICT or FP7 Security
- In principle FP7 Transport, Area 7.2.2.6. Traffic and Information Management, but this is currently not open for calls.
- Possibly **FP7-SME-2012** Research for the Benefit of SMEs
- **EUREKA** could be a possibility.

3. University of Novi Sad, Faculty of Technical Sciences

Intelligent (smart) packaging for food quality monitoring and embedded communication tools

[*The "Internet-of-Things" was an ICT objective in the past, not any more now.*]

- Possibly the FP7 KBBE: **KBBE-2012.2.3-03 or -04.** Single stage, deadline: **15 November 2011**
- Because of its strong application focus, EUREKA could be a possibility.

4. University of Kragujevac, MEF

Strengthening the potential and regional impact of Mechanical Engineering Faculty in the area of converging sciences and technologies

Needs to be adapted to the objectives of RegPot, then:

- *FP7 Capacities **FP7-REGPOT-2012-2013-1.** Deadline: 03 January 2012*

5. University of Kragujevac, MEF

Improvement of the competitiveness of enterprises in Serbia through knowledge and technology transfer, networking and providing high-tech business support services.

*The idea focuses very much on Services to SMEs and Networking. SSH asks for **research** to investigate types and models of innovation in the cultural and creative sectors, Developing European policies on intellectual property, …*

6. University of Kragujevac, MEF

Virtual/Rapid Prototyping/Manufacturing in collaborative engineering environment as high-tech total solution for SMEs

Development of Services difficult in FP7.

- Could this idea (maybe in a smaller scale) be an output/target or impact of Idea 4 (RegPot) ?
- Alternatively: business oriented service at MEF ?

7. Belit

Developing and Improving the Copolymer Cold Casting Production Process Using Rapid Prototyped Elements

Very much on services

- not **FP7-FoF-ICT-2011.7.2**
- **FoF.NMP.2012-7** Innovative technologies for casting, material removing and forming processes.

8. Development-Production Center

Development of equipment, technologies and processes for the treatment of the hard industrial waste

Is there a research element ?

- The Environment Programme has little on the topic of waste (apart from wastewater).
- If the approach is novel then possibly **FP7-SME-2012** Research for the Benefit of SMEs

Possible groupings

Is there a chance to group some of our members into consortia ?

- Belit (Idea 7: Copolymer Cold Casting Production Process) with MEF
- …

Call Deadlines

KBBE-2012.2.3-03 or -04. Single stage: **15/11/2011**

FP7-2012-NMP-ICT-FoF: **1/12/2011**

FP7-SME-2012 Research for the Benefit of SMEs: **6/12/2011**

FP7-REGPOT-2012-2013-1: **3/1/2012**

SME Programme

Research for SMEs supports small groups of innovative SMEs in solving technological problems and acquiring technological know-how. Projects must fit into the overall business and innovation needs of the SMEs, which are given the opportunity to subcontract research to RTD performers in order to acquire the necessary technological knowledge. Projects must render clear exploitation potential and economic benefits for the SMEs involved.

SME Programme

The SME participants are the direct beneficiaries of the project: they invest in the RTD project and outsource (subcontract) most of the research and demonstration activities to RTD performers and receive in return the technological know-how they need to develop new or improve existing products, systems, processes or services.

The relationship between the SMEs and the RTD performers under this programme is therefore a “customer-seller” relationship.

SME Programme

The idea is to allow SMEs to further develop their activities by buying knowledge from RTD performers, who sell their expertise and work.

R&D activities undertaken by the SMEs with their own resources are essentially focussed on initial specifications, on validation and testing of the acquired knowledge.

The real investment by the SMEs includes the price they pay for the know-how they wish to acquire: the intellectual property rights and knowledge developed during the project.

Minimum requirements for the consortium

Research for SMEs projects require participants from the following categories:

- SME participants: At least **three independent SMEs**, established in three different Member States or associated countries.
- RTD performers: At least **two RTD performers** which must be independent from any other participant and which can come from any country.

Examples of RTD performers are universities, research organisations and industrial companies, including research performing SMEs.

Recommendations for resources and duration

- The size of the consortium should typically be between 5 and 10 participants.
- The overall budget of the project should typically be between € 0.5 million to € 1.5 million.
- The duration of the project should normally be between 1 and 2 years.

If a project deviates from these recommendations a justification is required.

Candidates for the "Research for the Benefit of SMEs“

- Idea 1, WBC, Furnace
- Idea 2, Vlatacom, Road Traffic Control: research element ?
- Idea 3, Novi Sad, Smart packaging: as an RTDP
- Idea 8, Development Production Centre, Hard waste: research element ?

EUREKA is a market-oriented network

- Large strategic projects and SME projects
- Projects are co-funded by national or regional public and private sources
- Non-bureaucratic

The objective is to bring high quality research and development efforts to the market and to use the multiplying effects of co-operation.

Serbia

EUREKA member since 2002

Ministry of Education and Science

Project involvement

- 48 running projects
- 22 finished projects

Conditions in Serbia:

- At least 1 university and 1 SME involved
- At least one partner needs to be accredited by the Ministry as an “innovation company”
- Max funding: 50 kEuro per year per project

Situation:

- Accept and fund 8 to 12 new projects per year
- Currently 25 proposals in the pipeline

Cordis Group Members

Fundación AITIIP Zaragoza Aragon, Spain

The main objectives:

- Promoting activities that contribute to the development of a new business culture and enhancing competitiveness of enterprises.
- Developing activities that promote a technological improvement of industry and in particular of Aragon companies.
- Encouraging business initiatives designed to develop research, quality and new technologies to improve the environment in which they occur.
- Supporting the development, innovation, technology and expertise to contribute to the improvement of training and promote entrepreneurial initiatives.
- Carrying out high quality research in the operation areas of the technology center.

Cordis Group Members

Fundación AITIIP Zaragoza Aragon, Spain

Workshop on Rapid Manufacturing and Rapid Prototyping:

- M3 LINEAR. Lasercusing ® technology is based on the metal powder which is directly fused layer by layer. This produces high-density (> 99.7%) products that have excellent mechanical properties
- The PUR vacuum casting consists of obtaining parts in polyurethane with various properties (similar to thermoplastics) by their casting in silicone moulds in a vacuum atmosphere.
- Nylon casting vacuum lets to obtain parts directly in nylon (PA6) by the cast in silicone moulds particularly for this process due to the high temperatures required in the process of getting pieces of this material.

Cordis Group Members

Fundacio Privada Centre CIM

Barcelona Cataluña Spain

Private intermediate centre between industry and academia and has wide expertise in projects involving:

- Simulation and Management of productive and logistical systems
- Development of Computerized tools (E.g.: to model and simulate productive lines, to develop further CAD modules, etc.)
- Implementation of sensors, detectors and industrial instrumentation systems
- Development of Industrial Control and Monitoring advanced systems
- Incorporation of robots in the industrial environment
- Execution of Communication systems
- Improvement and Automation of Processes

Cordis Group Members

Fundacio Privada Centre CIM

RAPID PROTOTYPING LABORATORY

This laboratory has a working area of approximately 236 m2, and counts with the following technologies:

- Laser Sintering
- Stereolithography
- Wax printing
- CNC grinding
- Ultraviolet furnace

METROLOGY LABORATORY

INDUSTRIAL AUTOMATION LABORATORY

…..

Cordis Group Members

flexis AG

70565 Stuttgart Germany

Expertise description

flexis AG is technology leader in the area of production programme planning and market leader in the area of commercial vehicle planning. Customers are i.e. Daimler, Volkswagen, Audi, BMW, Mitsubishi, Honda, MAN, DAF, Leyland Trucks, Peterbilt, CNH, Continental automotive, and faurecia. Corporate headquarters of flexis AG, founded as a German limited company (GmbH) in 1997, are in Stuttgart. In 2000, flexis went public (flexis AG). Subsidiaries are located in Japan, Canada and the United States of America.